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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/113,090 | 07/10/1998 | KIA SILVERBROOK | ART34-US | 7669 |

7590 06/04/2003

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| EXAMINER |
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NGUYEN, LUONG TRUNG

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| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 06/04/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/113,090

Applicant(s)

SILVERBROOK ET AL.

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 6-8 filed on 3/24/2003 have been considered but are moot in view of the new ground(s) of rejection.

In re page 3, Applicants argue that there is no disclosure of any processor which “deblurs” the image after it has been captured, as is claimed.

In response, regarding claim 6, Applicants amended claim 6 with the limitation “a processor interconnected to said image sensor and said velocity detector and processing said sensed image under programme control utilising the velocity output to deblur said image and to output said deblurred image.” The Examiner considers that claim 6 as amended still do not distinguish from Misawa et al. patent in view of Suzuki patent. Misawa et al. disclose processor as combination of camera shake correction part 235, signal processing circuit 42 and picture image correction circuit 144 (figures 9-10, column 12, line 66 through column 13, line 65, column 14, lines 5-45). It should be noted that since output signal from elements 235, 42 and 144 is different from the input signal, therefore, it is a “processor.” Further, it is noted that the output signal from elements 235, 42 and 144 is free from deteriorated image quality because the camera shake is corrected (“deblurs” the image after it has been captured).

Claim Objections

2. Claims 6-8 are objected to because of the following informalities:

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Claim 6 (lines 9-10), "said processor means" should be changed to --said processor--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa et al. (US 5,282,044) in view of Suzuki (US 6,552,821).

Regarding claim 6, Misawa et al. disclose a camera shake correction system comprising an image sensor, disclosed as CCD 22 (figure 10, column 6, lines 45-50); a velocity detector, disclosed as angular velocity sensor 255 (figure 10, column 14, lines 14-15); a processor interconnected to said image sensor and said velocity detector and processing said sensed image under programme control utilising the velocity output to deblur said image and to output said deblurred image, disclosed as combination of camera shake correction part 235, signal processing circuit 42 and picture image correction circuit 144 (figures 9-10, column 12, line 66 through column 13, line 65, column 14, lines 5-45).

Misawa et al. fail to specifically disclose a portable handheld camera; and said processor is connected to an integral inkjet printer means internal to said portable handheld camera device.

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However, Suzuki teaches a printer-built-in camera which employs an ink-jet printer (figures 1-2, column 4, lines 25-55) and figures 1, 2 also show that this printer-built-in camera is a portable handheld device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Misawa et al. by the teaching of Suzuki in order to provide a printer-built-in image-sensing apparatus which print-outputs a sensed image on print medium immediately after image sensing, and reduce waiting time from the completion of printing to the next image sensing (column 1, lines 12-17, column 2, line 66 – column 3, line 4).

5. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa et al. (US 5,282,044) in view of Suzuki (US 6,552,821) further in view of Nobuoka (US 5,986,698).

Regarding claim 7, Misawa et al. and Suzuki fail to specifically disclose wherein said velocity detector comprises an accelerometer. However, Nobuoka discloses an optical method which detects overall movement of a video camera by using an acceleration sensor (accelerometer, column 1, lines 40-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system in Misawa et al. and Suzuki by the teaching of Nobuoka in order to obtain an image sensing apparatus which detects the movement of the apparatus to perform vibration blur correction (column 1, lines 43-46, column 2, lines 55-56).

Regarding claim 8, Nobuoka discloses wherein said accelerometer comprises a micro-electro mechanical devices (gyro sensor, column 1, lines 44-46).

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is **(703) 308-9297**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on **(703) 305-4929**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

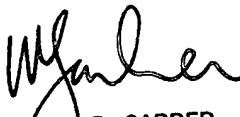
or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

LN LN
5/31/2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600